Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Call Authentication Trust Anchor

WC Docket No. 17-97

Reply Comments of the
Alliance for Telecommunications Industry Solutions

The Alliance for Telecommunications Industry Solutions (ATIS) hereby submits these reply comments in response to the Notice of Inquiry (NOI), released October 28, 2022, in the above-referenced docket. In the NOI, the Federal Communications Commission (Commission) seeks input on caller ID authentication for non-IP networks, including ATIS’ work to develop call authentication standards. ATIS is submitting these reply comments to update the Commission on the ongoing work programs within ATIS to address call authentication issues.

I. Background

ATIS is a global standards development organization that develops technical, operational, and strategic guidance and solutions for the information and communication technology (ICT) sector. ATIS’ diverse membership includes key stakeholders, including wireless, wireline, and VoIP service providers, equipment manufacturers, broadband providers, software developers, consumer electronics companies, public safety agencies, and internet service providers. ATIS is a founding partner and the North American Organizational Partner of the Third Generation Partnership Project (3GPP), the global collaborative effort that has developed the 4G Long-Term Evolution (LTE) and 5G New Radio (NR) wireless specifications and a founding partner in oneM2M, which develops global specifications for Machine-to-Machine (M2M)
communications systems and the Internet of Things (IoT).

ATIS’ work on call authentication standards primarily takes place within the ATIS Packet Technologies and Systems Committee (PTSC). PTSC develops standards related to services, architectures, signaling, network interfaces, next generation carrier interconnect, cybersecurity, lawful intercept, and government emergency telecommunications service within next generation networks.\(^1\) The ATIS PTSC and SIP Forum Joint IP Network to Network Interconnection (IP-NNI) Task Force has developed the Signature-based Handling of Asserted information using toKENs (SHAKEN) series of standards for managing the deployment of Secure Telephone Identity (STI) technologies to provide end-to-end cryptographic authentication and verification of the telephone identity in an Internet Protocol (IP)-based service provider voice network. The IP-NNI Task Force continues to examine issues related to IP-to-IP call authentication.\(^2\)

As noted in the NOI, ATIS is also examining non-IP call authentication. The Non-IP Call Authentication (NIPCA) Task Force within ATIS PTSC is focused on call authentication for TDM Originating Service Providers (OSP), TDM Transit Service Providers and TDM Terminating Service Providers (TSP). The task force has published three deliverables for the exchange of authenticated caller ID information on non-IP networks: (1) Signature-based Handling of Asserted information using toKENs (SHAKEN): Out-of-Band PASSporT Transmission Involving TDM Networks (ATIS-1000096); (2) Extending STIR/SHAKEN over TDM (ATIS-1000095v.002); and (3) Alternatives for Call Authentication for Non-IP Traffic

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\(^1\) For more information on ATIS PTSC, please see [https://www.atis.org/committees-forums/ptsc/](https://www.atis.org/committees-forums/ptsc/).

\(^2\) For more information on the work of IP-NNI Task Force, please see [https://www.atis.org/industry-collaboration/ip-nni-task-force/](https://www.atis.org/industry-collaboration/ip-nni-task-force/).
It should be noted that the ATIS Non-IP Call Authentication and IP-NNI Task Forces are focused on addressing technical issues associated with the development of call authentication standards. These groups also identify but do not resolve business and policy related issues.

ATIS also provides testing services via the ATIS Robocalling Testbed hosted by the Neustar Trust Lab. The testbed, which was launched in 2017, was recently migrated to a virtual, flexible cloud-based architecture that supports the latest capabilities, including delegate certificates, Out-Of-Band (OOB) SHAKEN, and Rich Call Data (RCD). This testbed is open to any service provider with an assigned Operating Company Number (OCN) as well as other stakeholders with solutions relevant to the SHAKEN framework.

II. Comments

In the NOI, the Commission seeks comment on a number of issues related to non-IP call authentication, including whether there are additional standards beyond those published by the ATIS NIPCA Task Force and, if so, what these standards address. ATIS is pleased to report that the ATIS NIPCA Task Force is developing a new technical report that is examining the viability of operationalizing these standards. This report will also call out any non-technical issues that may be associated with the previously developed standards, as policy issues were out of scope and not identified in the original documents.

ATIS also notes that that there is work underway with the IP-NNI on VoIP Interconnection over the Public Internet. This technical report will describes a “
based VoIP Interconnection" model, where IP connectivity between service providers is established over the public internet facilitating the in-band end-to-end passing of the SHAKEN PASSporT. The report will address the special measures that must be taken to deliver calls that traverse the public internet with the intent to provide adequate security and quality, including strong authentication mechanisms, encrypted call signaling, and media encryption via bilateral agreements.

III. Conclusion

ATIS appreciates the opportunity to provide its input to the NOI. ATIS also appreciates the considerable work that has been done by the Commission and the industry to address call authentication issues. ATIS notes that the development of call authentication standards and the establishment of the STI ecosystem have been successful because the industry has worked collaboratively and committed significant resources to this effort.

Respectfully submitted,

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